INTERNATIONAL SEARCH REPORT

International application No. PCT/BR 2005/000005

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B21D 28/28, B23K 26/00, B26F 1/31, E21B 43/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC7: B21D, B23K, B26F, E21B, B01D, B26D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) epodoc, fi cl txte, fi cl txte, paj

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO2004/001186A1 (COLUMBIA ENGENHARIA LTDA) 31 December 2003 (31.12.2003) the whole document.	1-4
Α	US4343358A (GRYSKIEWICZ) 10 August 1982 (10.08.1982) abstract, figures 1-5.	1-4
Α	US5059256A (KANAPENAS et al.) 22 October 1991 (22.10.1991) abstract, figures 1, 2.	1-4

X	Furi	ther	documents	are listed	in the	continuation	of Box	C.

See patent family annex.

- Special categories of cited documents:
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- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- "&" document member of the same patent family

Date of the actual completion of the international search
10 May 2005 (10.05.2005)

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INTERNATIONAL SEARCH REPORT

International application No. PCT/BR 2005/000005

	ion). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP0432958A1 (THE BLACK CLAWSON COMPANY) 19 June 1991 (19.06.1991) abstract, figures 1-9.	1-4
A	US2003/0089495A1 (BIXENMANN) 15 May 2003 (15.05.2003) abstract, figures 1-7.	1-4

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No. PCT/BR 2005/000005

		t document cited search report	Publication date	Patent family member(s)			Publication date
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				CA	С	2029515	1995-06-20
				US	A	5064537	1991-11-12
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				WO	A1	9002628	1990-03-22
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